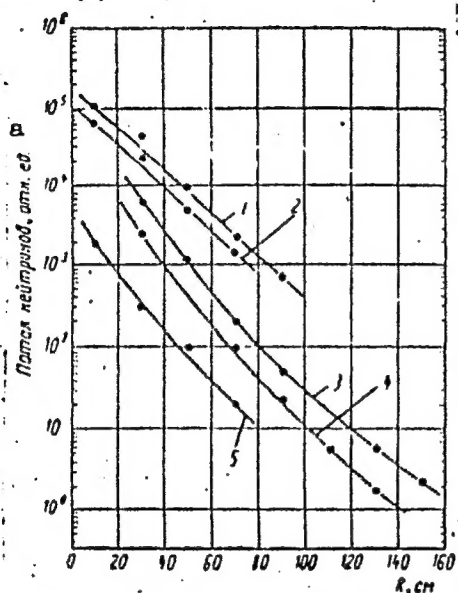


ACCESSION NR: AP4042264

ENCLOSURE: 01



Neutron attenuation function in carbon for different energy groups. The detectors used were:

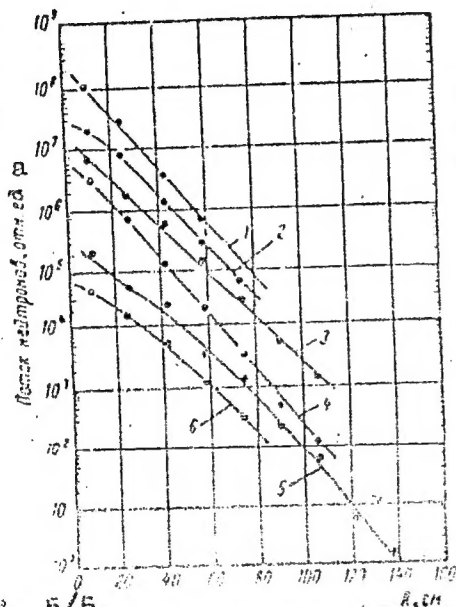
- 1 - Al²⁷
- 2 - S³²
- 3 - Cu⁶³
- 4 - proportional counter
- 5 - Th²³²

a - neutron flux, rel. units

Gard 4/5

ACCESSION NR: AP4042264

ENCLOSURE: 02



Neutron attenuation function in iron-carbon mixture for different energy groups. The detectors used were:

- 1 - Si^{32}
- 2 - Al^{27}
- 3 - Th^{232}
- 4 - recoil proton counter
- 5 - In^{115}
- 6 - Cu^{63}

1 - neutron flux, rel. value

Card 5/5

DARUGA, V. K.; LAZUTKIN, I. I.; NIKOLAYEV, A. N.; PINKHASIK, D. M.;
SAKHAROV, V. K.; SINITSYN, B. I.; TSYPIN, S. G.

Space-energy distribution of neutrons from a BR-5 reactor in an
iron-ore medium. Atom. energ. 17 no.1:63-65 J1 '64.(MIRA L7:7)

CHEPURNOV, V.S.; BURNASHEV, M.S.; DMITRIYEV, Ya.I.; LAZUR'YEVSKAYA, T.G.

One day's ration and feeding rhythm of young Black Sea flounder
(*Pleuronectes flesus luscus* Pall.) in the Shabolat Liman. Uch.
zap. Kish. un. 62 no.1:73-80 '62. (MIRA 16:7)

1. Kafedra zoologii pozvonochnykh zhivotnykh Kishinevskogo
gosudarstvennogo universiteta.

(Shabolat Liman--Flounders)
(Shabolat Liman--Fishes--Food)

1ST AND 2ND SERIES		PROCESSES AND PROPERTIES INDEX		3RD AND 4TH SERIES	
<p>2C</p> <p>Composition of <i>Artemisia scopariaformis</i>. G. LASHUNYANSKI (Bull. Univ. Asia Centrale, 1934, No. 19, 41-49).—The air-dry leaves contain H₂O 12.8, hemicellulose 13.3, cellulose 12.7, lignin 7.2, ash 5.3, H₂O-sol. 34 (including tannins 6, salts 4.4, reducing sugars 2.2%), Et₂O-sol. 12 (including essential oil 1.2 (α-pinene 4, β-pinene 30, myrcene 10%), wax 1, and resin 7.2%), and EtOH-sol. substances 5.14%. R. T.</p>					
<p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>					
FROM SYNONYMS		COLLECTIONS		FROM SYNONYMS	
SYNONYMS		COLLECTIONS		FROM SYNONYMS	
SYNONYMS		COLLECTIONS		FROM SYNONYMS	

BC LAZAREVSKY, G.V. 12-4

Composition of (A) *Artemisia terrestris* L. DANILEVSKI. (B) *A. sativa*, G. V. LAZAREVSKI. (C) *A. fucosa*. (D) *A. turanica*. Z. MANULIN (Acta Univ. Asiae Med., 1935, No. 9, 8-9, 9-11, 12-13; 14-16). (A) The air-dry plant contains H₂O 8.6, hemicellulose (I) 22.2, cellulose (II) 20.2, lignin (III) 10.2, protein 4.2, ash 3.25, Et₂O-sol. 6.4 (including essential oil 0.74% (cinole 8, camphor 6, borneol 7%)), H₂O-sol. 21.8 (including santonin 1, tannin 6, and carbohydrates 9.9%), and EtOH-sol. substances 2.7%.

(B) The air-dry plant contains H₂O 11.2, (I) 20.6, (II) 23.2, (III) 6.8, ash 4.8, Et₂O-sol. 8.2 (including essential oil 0.45, wax 0.9, and resin 6.4%), H₂O-sol. 22.4 (including tannin 3.6, reducing sugars 2.3, protein 1.35, and salts 1.8%), and EtOH-sol. substances 5.2%.

(C) and (D) The air-dry leaves of *A. fucosa* and *turanica* contain respectively H₂O 8.62 and 10.32, (I) 9.6 and 11.8, (II) 11.8 and 11.8, (III) 8.5 and 7.7, ash 5.37 and 5.79, Et₂O-sol. 11.3 and 14.1 (including 1.05 and 0.69% of essential oil), H₂O-sol. 27.3 and 27.3 (including reducing sugars 2.24 and 4.01, protein 5.75 and 6.37, salts 3.54 and 2.63, tannin 2.7 and 2.2%), and EtOH-sol. substances 2.5 and 1.0%. R. T.

ASR-5LA METALLURGICAL LITERATURE CLASSIFICATION

FROM SOURCE

RELIST OM CHV ISI

Chemical study of Ananthanum Lakhandi,
Bye. I. G. V. LAKHMEVARI and A. B. HADIKOY
(Hull. Univ. Asia Minor., 1937, No. 22, 171-176).
Two alkaloids, ananthanine and ananthamine,
 $C_{18}H_{27}O_3N$, m.p. 202-205° (decolor), n.D._D 1.507-
1.508; Ag₂SO₄ m.p. 140-145°. Have been isolated
from the plant. In addition, the roots contain 6%
for silk, wool, and leather.

R. T.

17

Chemical analysis of *Ammothamnus lehmannii* Bge. 1.
 G. V. Lazur'evskii and A. S. Sadykov. *Dokl. Akad. Nauk SSSR*, 1971-6 (in English, 170) (1938).—The investigation of a plant from the Kenimehsky district of U. S. S. R. revealed the presence of 2 alkaloids, *sophocarpine*, m. 82-3°, identical with the alkaloid isolated from *Sophora pachycarpa*, and *ammotamnusine*, $C_{17}H_{21}NO_3$ (?), m. 204-5°, optically inactive, not yet described in the literature. Its picrate m. 207-8°; hydriodide, m. 188-9°. The total yield of alkaloids is 0.5%. In addn. a dye is isolated in an amt. of 3% from the above-ground part of the plant and in an amt. of 8% from the roots which dyes wool and silk a red color.
 Gertrude Herend

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDER																										3RD AND 4TH ORDER																																																																																																																																	
PROCESS AND PROPERTIES INDEX																																																																																																																																																											
<p><i>Ca</i> 17</p> <p>Alkaloids from <i>Fritillaria raddaana</i> Pgl. (Liliaceae). (A preliminary report.) G. V. Larur'evskii and A. Sady- kov. <i>Trudy Usselskogo Gosudarst. Univ., Sbornik Rabot</i> <i>po Khim.</i> 15, 7-8(1939).—Dry ground <i>Fritillaria rad-</i> <i>daana</i> Pgl. bulbs (2.7 kg.) were moistened with 15% NH_4OH and extd. with dichloroethane. The dichloroethane extd. was shaken with 5% HCl, and the acid aq. soln. neutral- ized with 25% NH_4OH and satd. with potash, and extd. with ether. Distn. of the ether gave 22 g. of a yellow powder. This was heated with benzene. The benzene- insol. residue, recrystd. from alc., gave colorless needles, m. 265-7°, considered to be a new alkaloid, is given the name <i>raddanin</i>. It is insol. in water, ether, petroleum ether and benzene, sol. in hot alc. and chloroform; it contains 2 OH groups and analysis gave C 75.10, H 9.91, N 4.16 and OH 10.08%; mol. wt. 336. W. R. Henn</p> <p><i>Chair of Org. Chemistry, Central Asia State U.</i></p>																																																																																																																																																											
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<p>Alkaloids from <i>Convolvulus hamadas</i>. G. V. Larus'-evskii. <i>Trudy Uzbekskogo Gosudarst. Univ., Shornik Rabot Khim.</i> 15, 43-52 (1939).—<i>Convolvulus hamadas</i> of the convolvulaceae family belongs to alkaloid-contg. plants. The content of alkaloids varies greatly, depending on the time of the harvest and is different in various parts of the plant. The max. content of alkaloids is found in roots and in multianthous twigs. The max. yield of alkaloids is 0.42%. Qual. analyses gave pos. reactions for the presence of alkaloids in <i>C. hamadas</i> (Vved) v. Petr., <i>C. dorol-hovi</i> Rgl. and Schm., <i>C. pseudo-rantabrisa</i> Schrenk, <i>C. subhirsutus</i> Rgl. and Schm., <i>C. tichimanicus</i> M. Pop., <i>C. calvertii</i> Boiss., <i>C. erinatus</i> Led. and <i>C. divaricatus</i> Rgl. and Schm. Neg. reactions for the presence of alkaloids were obtained in <i>C. olgae</i> Rgl. and Schm., <i>C. spinifer</i> M. Pop., <i>C. fruticosus</i> Pall., <i>C. sordidus</i> Hge., <i>C. arvensis</i> L. and <i>C. linzatus</i> L. For a detailed study L. selected <i>C. hamadas</i>. A no. of solvents for the extrn. of the alkaloids from the plant was tried. The yields of total alkaloids extd. with benzene, gasoline, dichloroethane and alc. were, resp.: 0.40, 0.27, 0.42 and 0.25 g.%. Hygrine, $C_8H_{15}NO$, cuscohygrine, $C_{11}H_{19}NO$, and hamadine were obtained from <i>Convolvulus hamadas</i>. The 1st two are liquid alkaloids, sol. in ether, while hamadine is a solid cryst. alkaloid, insol. in ether. The investigation of chem. compn. and properties proved that hygrine and cuscohygrine are identical with the alkaloids obtained previously from <i>Erythroxylon rosea</i>. The identity was confirmed by a direct comparison (mixed m. p.). Hamadine is a new alkaloid. The structure of cuscohygrine was detd. and confirmed. It is expressed by $(NMe.CH_2.CH_2.CH_2.CH_2)_2CO$.</p> <p>The various consts. for the base of the 1st fraction, b_{50-60°}, from <i>C. hamadas</i> and those of hygrine (as given in the literature) are, resp.: d₂₀ 0.9392 and 0.9350; n_D 1.4505 and —; b_m 92-6° and 92-4°; m. p. of the picrate 148 and 148°; rotations 0° and -3.78°. The only difference between these 2 substances is the optical activity. This is, however, not essential for the identification because hygrine is very easily racemized. The various consts. for the base of the 3rd fraction, b_{120-7°}, and those of cuscohygrine (as given in the literature) are, resp.: d₂₀ 0.9829 and 0.9782; n_D 1.4864 and 1.4846; b_m 118-21° and 118-21°; m. p. of the nitrate 205° and 209°; m. p. of the picrate 212° and 215°; m. p. of the methiodide 234° and 244°; m. p. of the HCl salt 217° and 228°; m. p. of the HBr salt 225° and 234°; rotation 0° and 0° (inactive). Eleven references. W. R. Henn.</p>																																																																															
ASB-51A METALLURGICAL LITERATURE CLASSIFICATION																																																																															
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1ST AND 2ND CROSS		PROCESS AND PROPERTY INDEX		3RD AND 4TH CROSS	
CA		Investigation of the central Asiatic plants for the content of alkaloids. I. G. V. Lazur'evskii and A. Sadykov. <i>Trudy Uzbekskogo Gosudarst. Univ., Sbornik Trudov Khim. 15, 182-90(1939).</i> —The paper describes 239 kinds of plants collected in expeditions (along the Angren river, Southern Kayi-Kum, in the region of Brich-Mulla, in Chinggan) and from various botanical gardens. To detect alkaloids, the dried and ground plant (2-5 g.) was moistened slightly with 15% NH ₄ OH and infused for 24 hrs. with dichloroethane; 3 or 4 ml. of the ext. was shaken in a test tube with the same amt. of 3% HCl; several drops of 2% soln. of silicotungstic acid was added. Of the 239 kinds of plants investigated, 37 contained alkaloids. Those containing considerable amounts of alkaloids are: <i>Ephedra strobilacea</i> Bge., <i>E. ciliata</i> C. A. M., <i>Fritillaria raddiana</i> Rgl., <i>Ungernia triphæra</i> Bge., <i>Calligonum microcarpum</i> Borszcz., <i>Aconitum talassicum</i> M. Pop., <i>A. rotundifolium</i> Kar. et Kir., <i>Delphinium dasyanthum</i> Kar. et Kir., <i>D. semibarbatum</i> Blenert., <i>Thalictrum alpinum</i> L., <i>Leontice alberti</i> Rgl., <i>Argemone platyceras</i> , <i>Ammodendron sieversii</i> Fisch., <i>Thermopsis alterniflora</i> Rgl. et Schmalh., <i>T. alpina</i> (Pall) Led., <i>Gentiana kirilovi</i> Turcz., <i>Sweetia lactea</i> Bge., <i>S. marginata</i> Schrenk, <i>Convolvulus ischimianicus</i> , <i>C. culberti</i> Bivas., <i>C. crinaceus</i> Led., <i>C. kamadue</i> (Vved.) v. Petr., <i>C. korolkovi</i> Rgl. et Schmalh., <i>Heliotropium burharicum</i> B. Fedtch. and <i>Lysium ruthenium</i> Murr. W. R. Henn		17	
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION					
1ST AND 2ND CROSS		3RD AND 4TH CROSS		5TH AND 6TH CROSS	
GROUP		SUBGROUP		SUBSUBGROUP	
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	

COMMON ELEMENTS																									
1ST AND 2ND GROUPS													3RD AND 4TH GROUPS												
PROCESSES AND PROPERTIES INDEX																									
<p>ca</p> <p>Chemical investigation of <i>Fritillaria raddexia</i> RGL. / 8</p> <p>A. Sadikov and G. Lazur'evskii. <i>J. Gen. Chem.</i> (U. S. S. R.) 13, 159-63(1943) (English summary). - The bulbs of <i>Fritillaria raddexia</i> extd. with CHCl_3 in the presence of 45% NH_4OH yield 1% of a new alkaloid, <i>raddexinine</i>, $\text{C}_{17}\text{H}_{21}\text{O}_3\text{N}$, m. 255-7°; <i>perchlorate</i>, m. 201-5° (from H_2O); <i>hydrochloride</i>, m. 167-8° (from EtOH); <i>chlorosulfate</i>, m. 130-2° (dil. HCl); <i>methiodide</i>, m. 245-50° (from H_2O); <i>mono-Bz deriv.</i>, m. 235-6° (from EtOH). The alkaloid is inert to hydrolysis by boiling 20% alc. KOH. After extn. of the alkaloid, the bulbs were found to contain up to 60% usable starches, suitable for alc. production. G. M. K.</p> <p>Chem. Org. Chem., Central Asia State U.</p> <p>ASR-ALA METALLURGICAL LITERATURE CLASSIFICATION</p>																									

25

Dyes from Ammochamaea lehmanni Bge. A. Sadykov and G. Lazur'evskii. *J. Gen. Chem.* (U. S. S. R.) 13, 300-3 (1943) (English summary).—*Ammochamaea lehmanni* Bge roots in the macerated state, boiled with 20% NaOH, yield dyes on acidification of the ext. with 20% H₂SO₄; crude pptd. dyestuffs are washed with H₂O and filtered off; the yield is 14%. The superterranean part of the plant yields 4% by wt. of the same dyestuffs. The crude product on extn. with EtOH and evapn. of the latter yields a red powder, which extd. with EtOAc yields two products: sol. part, which has the formula C₁₈H₁₆O₄, m. 91-9° and the insol. part, which on recrystn. from EtOH is shown to be C₁₈H₁₆N₂O₄. The 1st product heated with Ac₂O gives the triacetyl deriv., m. 107-9° (from MeOH). Treatment of the 1st product with KMnO₄ in alk. soln. yields oxalic acid; distn. of the dye with Zn failed to yield identifiable products; however, fusion with NaOH yielded AcOH and phloroglucinol. The 2nd dye was not studied further; however, it showed excellent dyeing properties for silk. The dyes appear to be related to mangostane isolated by Schmidt (*Ann.* 93, 83 (1855)). G. M. Kosolapoff

ASS-514 DETAILING LITERATURE CLASSIFICATION

Alkaloids of *Ammodramus lehmanni* Bge. A. Soltykiv and G. Lauer-Ekshil. *J. Gen. Chem.* (U. S. S. R.) 13, 314-18 (1943) (English summary).—From *Ammodramus lehmanni* Bge. the authors extd. a no. of alkaloids, some of which have been previously isolated from other plants. The plant was extd. with EtOH contg. 2% NH₃, the extract, the residue treated with 10% H₂SO₄, filtered and the filtrate extd. with CHCl₃ for purification; the acid soln., after neutralization with NH₄OH and satn. with KOH, was extd. with Et₂O, then with CHCl₃. Concn. of the exts. gave the alkaloids as a viscous brown mass in 0.5-5% yield based on the dry plant weight. The Et₂O-sol. fraction on distn. *in vacuo* gave: *pachycarpine*, C₂₁H₂₇N, bp. 130-5°, *dicarpate*, m. 207-8° (from ROH-Me₂CO); *HI salt*, m. 230-1° (from ROH); *methadide*, m. 217-8° (from MeOH). A higher-boiling fraction (bp. 151-210°) was purified by soln. in EtOH and treatment with 5% HI; the *HI salt* was filtered off, dissolved in H₂O, treated with NH₄OH, satd. with KOH and extd. with Et₂O, the evapn. of which gave *sophocarpine*, C₂₁H₂₇N, bp. 112°, m. 83-5°; *HI salt*, m. 277-8° (from EtOH). The alkaloid isolated after evapn. of the CHCl₃ ext. was purified by rubbing with Me₂CO, followed by fractional extn. with CHCl₃ at gradual degrees of acidification; the final product, m. 110-201° (from Me₂CO), had the empirical formula C₂₁H₂₇N₂O₂ and was named *ammodramine*; its *picrate*, m. 213-14° (from EtOH); *HI salt*, m. 183-9° (from 90% EtOH). G. M. Kozolapoff.

G. M. Koncharenko

ca

10

New method for the isolation of lupinine from technical anabasine sulfate. A. Selyukov and G. Lazurkevskii J. Gen. Chem. (U. S. S. R.) 13, 519-21(1944) (English summary).—An improved method for isolation of lupinine was devised by the authors. The crude alkaloid mixt. from anabasine sulfate was sepl. by the Orekhov method (O. and Menshikov, C. A., 28, 3347) and distd. in vacuo. The low-boiling fraction, bp 136°, consists of lupinin and anabasin. The mixt. is dissolved in dry PhMe and treated with Na with stirring and heating. On cooling the Na lupinate is filtered off, washed with dry MePh, the ext. dried and concd. to yield cryst. lupinine (97% recovery). The mother liquor after distn. yields anabasin. The use of petr. ether for washing Na lupinate also appears to give a better product than PhMe. The best results were obtained when petr. ether was used as the medium for the reaction with Na.

G. M. K.

LAZUR'YEVSKIY, G.B.

Lazur'yevskiy, G.B. "Chemical research on the coloration of some plants of the legume family," (reference), Soobshch. o nauch. tabotakh chlenov Vsesoyuz. khim. o-va im. Mendeleeva, 1948, No. 2, p. 16-17

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

LAZUR'YEVSKIY, G. V.

"Concerning A. M. Gakhokidze's and N. D. Kutidze's 'Research on the Dye
Gleditschia Triacanthos' and A. M. Bakholidze's 'Synthesis of Akrammerin',"
Zhur. prik. khim., No.6, 1949

LAZUR'YEVSKIY, G.V.

New dyes from leguminous plants. Trudy SAGU no.15:101-105 '50.
(MLRA 9:5)

(Dyes and dyeing--Chemistry) (Leguminosae)

LAZUR'YEVSKIY, G.V.; KATVA, Ye.A.

Chemistry of sophoreol. Trudy SAGU no.15:107-111 '50.(MLR 9:5)
(Sophoreol) (Dyes and dyeing--Chemistry)

CA

Syntheses from cotarnine. V. A. Madennikova and G. V. Lazur'evskii (Mid-Asiatic State Univ., Alma Ata). *Doklady Akad. Nauk S.S.S.R.* 72, 305-6(1950).—Heating cotarnine (I) with an equimolar amt. of $\text{CH}_3(\text{CO}_2\text{H})_2$ in pyridine yielded 2-methoxy-3,4-methylenedioxy-6-(2-methylaminoethyl)cinnamic acid, whose HCl salt decomp. 202-3°; *Et* ester, b. 170-2°. Stirring I with $\text{CO}(\text{CH}_3, \text{CO}_2\text{H})_2$ yielded $\text{CO}(\text{CH}_3: \text{CHR})_2$ [R = 2-methoxy-6-(2-methylaminoethyl)-3,4-methylenedioxyphenyl], m. 83°. $\text{AcCH}_2\text{CO}_2\text{H}$ similarly gave RCH:CHAc (III), m. 156°, which is apparently the structure of the reaction product of I with Me_2CO (cf. Liebermann and Kropl, *Ber.* 37, 211(1904); Dey and Kantam, *C.A.* 30, 472°). Heating I with barbituric acid in EtOH in the presence of pyridine yielded a yellow-green $\text{RCH:C.CO.NH.CO.NH.CO}$, decomp. 184° (from EtOH).

G. M. Kosolapoff

sol. in acids or bases.

Dist: LELj/LE2c(j)

New solvent for investigation of phenolic compounds by paper chromatography. D. A. Novokhatin and G. V. Lazur evskii. *Doklady Akad. Nauk SSSR*, 1964, 196: 1164-1165. Referat. Zhur., Khim. 1964, Abstr. No. 66464. The solvents mists. of BuOH-AcOH-H₂O, and others similar to that, used formerly for sepn. of phenols, give elongated spots and leave "tails" explained by the easy oxidation of the phenols by the air. To eliminate the oxidation, the use of 2% H₂O₂ as solvent in 10% propyl alcohol results in sharp and fast sepn. of the phenols. The solvent front moves 5-10 cm as against 2-3 cm in the former case. The method is investigated. The method is used for the separation of gallic acid & 10%. The values of R_f (rising process) are: gallic acid 0.30; pyrogallol 0.65; phloroglucinol 0.50; pyrocatechol 0.30; pyrogallol 0.65; phloroglucinol 0.50; benzoylelresorcinol 0.30.

4
2 May
2

gag

at 180-200° yields myrcene, b. 180-200°, dihydromyrcene, b. 180-200°
R. Dowbenko

LAZUR'YEVSKIY, G.V.

✓ Leguminous dyes. G. V. Lazur'evskiy. *Trudy Botan. Inst. im. V. L. Komarova Akad. Nauk S.S.S.R.* 5, No. 5, 90-119 (1955).—The roots of species of the tribe Sophoreae, collected in Soviet Middle Asia, contain amorphous, high mol.-wt. phenolic dyes named sophoreols (I) which are derivs. of 7-hydroxy-4-chromanone with a partly oxidized C_{10} terpene side chain. I can be used for dyeing. On fusion with KOH there was obtained resorcinol, β -resorcylic acid, and a phenolic compd. $C_{19}H_{24}O_5$ (II), m. 120-1°, hexahydro deriv. m. 135-6°. Heating 2 g. II with 50 g. Zn dust gives a compd. C_8H_{14} , b. approx. 140°, apparently 2,6-dimethylheptadiene. Oxidation of Me ether of II with 27% H_2O_2 gives β -resorcylic acid hydroperoxide, m. 180-5° (explodes) and the corresponding cyclic peroxide m. 95-5° (explodes). Oxidation of II with HNO_3 gives AcMe; II Me ether gives with CrO_3 both AcOH and $(COOH)_2$. Oxidation of I with HNO_3 yields styphnic acid, m. 173°; with CrO_3 it yields AcMe. Methylated I gives with $KMnO_4$ β -resorcylic acid di-Me ether, m. 108-8.5°. Pyrolysis of I at 200° yields myrcene, b. 100-2°, dihydratetrabromide, m. 80-7°.

R. Dowbenko

LAZUR'YEVSKIY, G. V. (Prof.)

Jute-seed oil. G. V. Lazur'evskii and V. I. Cherep
(State Univ., Kishinev). *Moskopolno-Zhivetsa* From. 23,
N. 1. 9-10(1957).—Analysis of jute-seed oil produced in
U.S.S.R. gave the following values: sp. gr. at 20° 0.929,
as 1.4730, solidification point -18°, acid no. 9.13, sapon.
no. 187.5, iodine no. 121.1, Hehner's no. 91.1, glycerol
9.8, and unsaponifiable matter 4.8% and sapon. acids 12.8.
Vladimir N. Krukovich

Med

Country : USSR
 Category: Cultivated Plants. Medicinal. Essential Oil-Bearing.
 Toxins.

M

Abs Jour: RZhBiol., No 11, 1958, No 49152

Author : Lazur'yevskiy, G.V.
 Inst : Kishinev Univ.
 Title : Study of Glucosides in Jute Seeds.

Orig Pub: Uch. zap. Kishinevsk un-t, 1957, 27, 3-10

Abstract: Earlier it was reported by the authors that bitter substances in jute grown in USSR pertain to glucosides (I) which occur in digitalis-strophanthus. One of the (I) was partially characterized and the disaccharide found in the seeds in free state has been described (Uch.zap. Kishinevsk. Un-t, 1954,

Card : 1/3

Country : USSR
 Category: Cultivated Plants. Medicinal. Essential Oil-Bearing.
 Toxins.

Abs Jour: RZhBiol., No 11, 1958, No 49152

14, 57). Experiments showed that separation of (I) from seeds is simplified by carrying out preliminary fermentation through ferments contained in the seeds themselves. Fermented seeds were extracted with alcohol, admixtures were removed with petroleum ether and lead hydroxide. Yield of total (I) - 0.24%. Division was carried out by chromatography method on a column with aluminum hydroxide. The experimental part of the article consists of sections: 1) Separation and purification of total (I); 2) Division of (I) by the chromatographic method; 3) Chemical state of (I) "A", 4) Study of the aglycone part of (I) "A". From

Card : 2/3

Country : USSR

M

Category: Cultivated Plants. Medicinal. Essential Oil-Bearing.
Toxins.

Ans Jour: IZMol., No 11, 1958, No 49152

jute seeds, two (I) have been separated producing
geninstrophanthidin. One of them, glucoside "A"
is characterized chemically as a compound with the
composition $C_{20}H_{42}O_9 \cdot 2H_2O$. Methods of separation
and division of glucosides have been developed. --
R.I. Serebryanny

Card : 3/3

LAZUR'YEVSKIY, G. V.

AUTHORS: Terent'yeva, I. V., Lazur'yevskiy, G. V. 79-11-54/56

TITLE: Investigations of the Alkaloids of Carex Brevicollis D. C.
(Issledovaniye alkaloidov iz carex brevicollis D. C.).

PERIODICAL: Zhurnal Obshchey Khimii, 1957. Vol. 27, Nr 11,
pp. 3170-3173 (USSR)

ABSTRACT: Among the numerous Cyperaceae the poisonous Carex
brevicollis D. C. which also grows on the shores of the
Black Sea has chemically not been thoroughly investigated.
The plants of this genus were hitherto not considered
alkaloid-containing. The authors found that some species
of Cyperaceae (C. brevicollis D. C., C. Michxlii Host,
C. pilosa Scop) possess alkaloids and that these are new
compounds hitherto not described in publications. The object
of the present paper is the investigation of Carex
brevicollis D. C., a sedge. The total quantity of bases of
this plant is extracted with dichloroethane, or the plant
mass is treated with a weak sulfuric acid solution, where
upon a brownish powder difficult to dissolve in water
manifests itself. The total yield of alkaloids, calculated
on the basis of the dry initial product, amounts to 0,5 %.

Card 1/2 The main alkaloid of the name of Brevicollin is from the bases

Investigations of the Alkaloids of *Carex Brevicollis* D. C. 79-11-54/56

accompanying it separated by recrystallization with methanol and finally purified with hydrochloride. It is a white crystalline substance, optically inactive and melts at 223-224°C. It is represented by the formula $C_{11}H_{10}N_2$. Its salts and derivatives crystallize well. The character of the absorption curves in the ultraviolet part of the spectrum indicates an alkaloid which must be classified with the complicated compounds of the indol series, which fact could also be proved by the varicolored reactions proper to the indol alkaloids. There are 3 figures, 1 table, and 5 references, 3 of which are Slavic.

ASSOCIATION: Kishinev State University (Kishinevskiy gosudarstvennyy universitet)

SUBMITTED: October 15, 1956

AVAILABLE: Library of Congress

Card 2/2 1. *Carex Brevicollis* D. C. - Alkaloid separation
2. Alkaloids - Sources 3. Dichloroethane - Applications

LAZUR'YEVSKIY, G. V.

LAZUR'YEVSKIY, G.V., professor (Kishinev).

Ambergris and sclareol. Priroda 46 no.5:83-85 My '57.
(Ambergris) (Sclareol) (MLRA 10:6)

IAZUR'YEVSKIY, G.V.; POPA, D.P.

Synthesis based on sclareol. Trudy VNIISNDV no.4:82-84 '58.
(MIRA 12:5)

1. Kishinevskiy gosudarstvennyy universitet.
(Sclareol)

5(0)

SOV/63-4-2-25/39

AUTHORS: Lazur'yevskiy, G.V., Professor, Terent'yeva, I.V. Candidate of Chemical Sciences

TITLE: Conference on the Chemistry of Plant Substances

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 2, pp 273-274 (USSR)

ABSTRACT: In September 1958 a scientific Conference on the chemistry of plant substances was held in Kishinev by the VKhO imeni Mendeleyev together with the Moldaviya branch of the AS USSR and the Kishinev State University. It was attended by scientists from the institutes organicheskoy khimii (Organic Chemistry), biokhimii (Biochemistry), fiziologii rasteniy (Physiology of Plants) of the AS USSR, khimicheskaya laboratoriya Botanicheskogo instituta AN SSSR (Chemical Laboratory of the Botanic Institute of the AS USSR, Moskovskiy institut tonkoy khimicheskoy tekhnologii (Moscow Institute of Fine Chemical Technology), Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut (All-Union Scientific Research Chemical-Pharmaceutic Institute), VNIISNDV, VILAR, Institut organicheskoy khimii AN USSR (Institute of Organic Chemistry of the AS UkrSSR), Institut khimii prirodnaykh soedineniy AN

Card 1/3

Conference on the Chemistry of Plant Substances

SOV/63-4-2-25/39

UzSSR (Institute of the Chemistry of Natural Compounds of the AS Uzbek SSR) and others. President of the Gosplan of the Council of Ministers of the Moldaviya SSR, N.G. Chorb, opened the Conference with report: "On the Perspectives of Industrial Development of Moldaviya for 1959 - 1965". Professor N.A. Preobrazhenskiy presented a paper on the state of the chemistry of natural compounds, his coworkers R.P. Yevstigneyeva and I.K. Sarycheva on syntheses in the series of indole alkaloids; Academician of the AS Uzbek SSR, A.S. Sadykov on the complex chemical investigation of the cotton plant; M.N. Zaprometov and A.R. Guseva on new data of the biogenesis of complex organic substances in plants; Doctor V. Gerout (Prague) on research in the field of sesquiterpenes carried out in the laboratory headed by F. Sorm; T.M. Orgiyan and D.P. Popa on synthetic work carried out in the Department of Organic Chemistry of the Moldaviya Branch of the AS USSR; A.D. Kuzovkov, A.S. Labenskiy, O.S. Madayeva on the structure of aconite alkaloids and the use of gluco-alkaloids and saponines in the synthesis of steroid hormones; N.K. Abubakirov on the study of the glycosides of jute; N.P. Kir'yalov on the structure of galbanum acid found in ferula plants;

Card 2/3

Conference on the Chemistry of Plant Substances

SOV/63-4-2-25/39

V.V. Arasimovich and S.V. Baltaga on the pectin substances of the fodder melon; Professor A.V. Ablov and D.G. Batyr on a more exact micromethod for determining reducing sugars.

Card 3/3

LAZUR'YEVSKIY, G.V.; NOVOKHATKA, D.A.

Tanning substances of the smoke tree [with summary in English].
Biokhimiia 24 no.1:9-14 Ja-F '59. (MIRA 12:4)

1. The Moldavian Branch of the Academy of Sciences of the U.S.S.R.,
Kishinev.

(SMOKE TREE)

(TANNINS)

AUTHORS: Lazur'yevskiy, G. V., Popa, D. P. SOV/79-29-1-70/74

TITLE: Syntheses Based Upon Sklareol (Sintezy na osnove sklareola).
I. Investigation of the Reaction Products of Sklareol With
Hydrogen Chloride (I. Issledovaniye produktov vzaimodeystviya
sklareola s khloristym vodorodom)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 1, pp 332-336 (USSR)

ABSTRACT: Ditherpene alcohol has attracted the attention of chemists because of
its peculiar structure (I) and availability. It is a part of
nutmeg sage and can be easily synthesized as a by-product in
the production of etherial sage oil. During the past years the
chemists have dealt with its structure which is related to
ambrein and plays an important part in perfume production. In
connection with the oxidizing separation of sklareol indeed
several pleasant-smelling compounds were obtained which may be
used as perfect substituents for amber. The possibilities of
transformation of sklareol into new products valuable in
practice have not been exhausted. The authors investigated the
hydrochlorination of sklareol in order to obtain its deriva-
tives, containing the amino group. They did, however, not suc-
ceed in separating the well-known trichlorosklareol. In this

Card 1/3

SOV/79-29-1-70/74

Syntheses Based Upon Sklareol. I. Investigation of the Reaction Products of Sklareol With Hydrogen Chloride

connection each time the liquid product $C_{20}H_{33}Cl$ was obtained. The analysis of its infrared spectrum showed that it is related to the spectra of sklarenes (II) and (III) which were obtained in connection with the dehydration of sklareol (Ref 6) and that in the molecule of the reaction product of sklareol with HCl a tertiary-primary $>C=CH_2$ and a secondary-primary- $CH=CH_2$ bond is contained. The presence of a tertiary-primary carbon-carbon bond in the reaction product of sklareol with HCl was also confirmed by the combination separation spectra. Apart from this a line in the spectra indicated the presence of chlorine in this product. In the case of a careful oxidation of the before obtained monochloro derivative with permanganate two products were separated: The neutral one with the composition $C_{20}H_{32}O$ melts at $97-98^\circ$, has no active hydrogen, does not produce an oxime and semi-carbazone and with respect to its spectrum analysis it has the group $\begin{array}{c} >C-O-C< \\ | \quad | \end{array}$ and $-CH=CH_2$.

Card 2/3

Based upon these results the above mentioned neutral product

SOV/79-29-1-70/74

Syntheses Based Upon Sklareol. I. Investigation of the Reaction Products of Sklareol With Hydrogen Chloride

can be classified among the oxides of the structure (V). The second product with a melting point of 99 - 101° is an oxy acid of the composition $C_{15}H_{26}O_3$ and corresponds to the chemical and spectrum analytical investigations according to formula (IV). Also the further investigation results proved that the reaction product of sklareol with HCl is a mixture of isomers with the composition $C_{20}H_{33}Cl$, one of them is compound (VII). There are 3 figures and 7 references, 2 of which are Soviet.

ASSOCIATION: Moldavskiy filial Akademii nauk SSSR (Moldavian Branch of the Academy of Sciences, USSR)

SUBMITTED: November 4, 1957

Card 3/3

LAZUR'YEVSKIY, G.V., doktor khim. nauk, prof., red.; KHARITONINA, A.A.,
red.; MANDEL'BAUM, M.F., tekhn. red.

[Alkaloid plants of Moldavia] Alkaloidonosnye rasteniia Moldavii.
Pod red. G.V.Lazur'evskogo. Kishinev, Izd-vo "Shtiintsa," 1960.
64 p. (MIRA 14:7)

1. Akademiya nauk SSSR. Moldavskiy filial. Institut khimii
(Alkaloids) (Moldavia--Botany, Medical)

POPA, D.P.; LAZUR'YEVSKIY, G.V.

Syntheses based on sclareol. Part 2: Reaction of hydrochlorination of sclareol and dihydrosclareol. Zhur.ob.khim. 30
no.6:2070-2073 Je '60. (MIRA 13:6)

1. Institut khimii Moldavskogo filala Akademii nauk SSSR.
(Sclareol)

POPA, D.P.; LAZUR'YEVSKIY, G.V.

Syntheses based on sclareol. Part 3: Synthesis of amino derivatives of sclareol. Zhur.ob.khim. 30 no.6:2074-2077
Je '60. (MIRA 13:6)

1. Institut khimii Moldavskogo filiala Akademii nauk SSSR.
(Sclareol)

LAZUR'YEVSKIY, G.V.; NOVOKHATKA, D.A.

Syntheses based on sclareol. Part 4: Introduction of the amino group into the oxidation products of sclareol. Zhur. ob. khim. 30 no.9:3123-3125 S '60. (MIRA 13:9)

11 Moldavskiy filial Akademii nauk SSSR, Institut khimii.
(Sclareol) (Amino group)

LAZUR'YEVSKIY, Georgiy Vasil'yevich; TERENT'YEVA, Ida Vladimirovna;
SHAMSHUKIN, Aleksandr Andreyevich; TSUKERVANIK, I.P., red.;
STUKOVNIN, N.D., red. izd-va; VORONINA, R.K., tekhn. red.

[Practical work in the chemistry of natural compounds]
Prakticheskie raboty po khimii prirodnykh soedinenii. Moskva,
Gos.izd-vo "Vysshaya shkola." No.1. [Methods of isolation,
separation, and identification] Metody vydeleniia, razdeleniia
i identifikatsii. 1961. 191 p. (MIRA 15:4)
(Chemistry, Organic--Laboratory manuals)

POPA, D.P.; LAZUR'YEVSKIY, G.V.

Synteses based on sclareol, Part 5: Preparation of N. H-di (Chloro-ethyl)-15-amino- $\Delta^{8(20),13(14)}$ -sclarodiene. Zhur.ob.khim. 31
no.5:1729-1731 My '61. (MIRA 14:5)

1. Institut khimii Moldavskogo filiala AN SSSR.
(Sclareol)

POPA, D.P.; LAZUR'YEVSKIY, G.V.

Syntheses based on sclareol. Part 6: Some new physiologically active amino derivatives of sclareol. Zhur. ob. khim. 31 no. 11:3835-3838 N '61. (MIRA 14:11)

1. Institut khimii Moldavskogo filiala Akademii nauk SSSR. (Sclareol)

MATYUSHENSKIY, B.V.; LAZUR'YEVSKIY, G.V.; IVANOV, N.V.

By-products of the essential oil industry as raw materials for
the production of furfurole. Zhur.prikl.khim. 35 no.4:873-876
Ap '62. (MIRA 15:4)

1. Kishinevskiy gosudarstvennyy universitet.
(Furaldehyde) (Oil industries--By-products)

LAZURKEVSKIY, G. V.; POPA, D. P.

" Synthesis of some analogues of diterpenic alkaloids. "

report submitted for the IUPAC 2nd International Symposium on
the Chemistry of Natural Products, Prague, Czech., 27 Aug - 2 Sep 62

LAZUR'YEVSKIY, G.V.

Second International Symposium on the Chemistry of Natural
Compounds. Zhur. VKHO 8 no.5:563-564 '63. (MIRA 17:1)

1. Deystvitel'nyy chlen AN Moldavskoy SSR.

POPA, D. P.; LAZUR'YEVSKIY, G. V. —

Syntheses involving sclareol. Part 7: Sclareol and 13-epi-sclareol from clary (*Salvia sclarea*). Zhur. ob. khim. 33
no.1:303-307 '63. (MIRA 16:1)

1. Institut khimii AN Moldavskoy SSR.

(Sclareol) (Clary)

LAZUR'YEVSKIY, G.V., akademik; TERENT'YEVA, I.V.; TSARANOVA, T.V.

Colloquy on the chemistry of indole compounds. Zhur. VKHO
9 no.5:575-576 '64 (MIRA 18:1)

1. AN Moldavskiy SSR (for Lazur'yevskiy).

KUCHKOVA K.I.; LAZUR'YEVSKIY, G.V.; TURENT'YEVA, I.V.

Alkaloids from *Thalictrum minus* L. growing in the Mold. SSR.
Izv. AN Mold. SSR no.20:98-99 '62.

24.11.1962

L 59209-65

ACCESSION NR: AR5017536

UR/0058/65/000/006/D033/D033

SOURCE: Ref. zh. Fizika, Abs. 6D246

AUTHORS: Saley, L. A.; Lazur'yevskiy, G. V.; Popa, D. P.

TITLE: Infrared spectra of some derivative diterpenes of the sclareol series

CITED SOURCE: Izv. AN MoldSSR. Ser. yestestv. i tekhn. n., no. 9, 1963, 69-73

TOPIC TAGS: infrared spectrum, sclareol derivative, characteristic frequency, epimer pair

TRANSLATION: Infrared spectra of the derivatives of diterpenes of the sclareol series were obtained (chlorides, amines, epoxides, acids, ethers, and some compounds which are the intermediate or final products of syntheses based on sclareol, and also epimers in the 13th asymmetrical center). The characteristic frequencies of these compounds are established. The dependence of the infrared spectra on the epimer pairs of compounds of the spatial location of the substitutes at C₁₃ is noted.

SUB CODE: OC, OP

ENCL: OC

Card

1/1

KAL'YAN, B.N.; LAZUR'YEVSKIY, G.V.

Chemical characteristics of diterpene alcohol from lavender.
Uch.zap.Kish.un. 68:84-86 '63 [cover '64].

(MIRA 18:12)

ZHUNGIYETU, G.I.; VOLOVEL'SKIY, L.N.; DOROFYENKO, G.N.; LAZUR'YEVSKIY, G.V.

Pyrylium derivatives on the basis of steroid hydroxymethylketones.
Khim. prirod. soed. no.5:318-321 '65. (MIRA 18:12)

1. Institut khimii AN Moldavskoy SSR, Rostovskiy-na-Donu gosudarstvennyy universitet i Ukrainskiy institut eksperimental'noy endokrinologii. Submitted March 19, 1965.

DOROFYENKO, G.N.; LAZUR'YEVSKIY, G.V., akademik; ZHUNGIYETI, G.I.

Synthesis of pyrylium salts by the condensation of hydroxy-methylenecyclohexanone with ketones. Dokl. AN SSSR 161 no.2: 355-357 Mr '65. (MIRA 18:4)

1. Rostovskiy-na-Donu gosudarstvennyy universitet i Institut khimii AN Moldavskoy SSR. 2. AN Moldavskoy SSR (for Lazur'yevskiy).

LAZUR'YEVSKIY, G.V., akademik; SHATSKAYA, A.A., kand. khim. nauk

Research in the field of natural and biologically active compounds.
Vest. AN SSSR 35 no.2:62-65 F '65.

(MIRA 18:3)

1. Institut khimii AN Moldavskoy SSR. 2. AN Moldavskoy SSR (for
Lazur'yevskiy).

ZHUNGIYETU, G.I.; DGROFEYENKO, G.N.; LAZUR'YEVSKIY, G.V., akademik

Synthesis of 17-methyldihydrotestosterone derivatives condensed with
pyrylium and pyridinium cycles. Dokl. AN SSSR 163 no.2:372-374 J1 '65.
(MIRA 18:7)

1. Rostovskij-na-Donu gosudarstvennyy universitet i Institut khimii
AN MSSR. 2. AN MSSR (for Lazur'yevskiy).

S/137/61/000/007/020/072
A060/A101

AUTHORS: Bayrakov, V. I., Fedin, V. P., Lazutin, A. G.

TITLE: Some data from the investigation of the operation of the reversing mill 1200 with reelers in the furnace

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 7, 1961, 7, abstract 7D38
("Tr. Konferentsii: Tekhn. progress v tekhnol. prokatn. proiz-va".
Sverdlovsk, Metalliurgizdat, 1960, 572-581)

TEXT: Investigations were carried out on the rolling of steel sheets mark St. 2 and St. 3 with thickness 1.5 - 2 mm and width 620 - 1,000 mm. It was established that: 1) the metal pressure on the rolls increases from the first passes to the last ones in the roughing stand and in the planishing stand - inversely; 2) the average specific pressure increases with the ratio of the length of the gripping arc to the mean thickness of the sheet being reduced (for the roughing stand); 3) the average specific pressure increases with decrease in the ratio of the strip thickness after reduction to the roll diameter (for the planishing stand); 4) the maximum torques on the shaft of the motor installed are within admissible limits; 5) the maximum specific energy expenditure does

Card 1/2

Some data from the investigation ...

S/137/61/000/007/020/072
A060/A101

not exceed 24 kwh/ton; 6) to avoid motor overheating it is necessary to increase the number of passes.

V. Pospekhov

[Abstracter's note: Complete translation]

Card 2/2

ZASUKHA, P.F., kand.tekhn.nauk; LAZUTIN, A.G., inzh.; ZAVERYUKHA, A.Kh.,
inzh.; VOLEGOV, V.P., inzh.; FRATSENYUK, I.V., inzh.

Selection of an efficient type of sheet rolling mill. Stal' 21
no.12:1090-1092 D '61. (MIRA 14:12)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov
i Novolipetskiy metallurgicheskiy zavod.
(Rolling mills)

SOROKO, L.N., inzh.; FILONOV, V.A., inzh.; KSENZUK, F.A., inzh.;
TSIRLIN, B.M., inzh.; PAVLISHCHEV, V.B., inzh. Prinimali
uchastiye: BABAKOV, A.A.; BOROVSKIY, V.V.; YASHCHENKO, B.T.;
LAZUTIN, A.G.; ZAVERYUKHA, A.Kh.; FRANTSEYUK, I.V.; ORLOVA, T.K.

Experimental rolling of stainless steel slabs on a 1200 mill
with coilers in the furnace. Stal' 21 no.12:1092-1096 D '61.
(MIRA 14:12)

1. Zavod "Zaporozhstal'" (for Soroko, Filonov, Ksenzuk,
TSirlin, Pavlishchev).

(Rolling mills—Equipment and supplies)
(Steel, Stainless)

L 20233-65 EWT(1)/EWG(v)/FCC/EEC-4/EEC(t)/EWA(h) Pb-4/Po-4/Pe-5/
Pq-4/Pae-2/Peb/Pi-4 AFWL/SSD(c)/AEDC(b)/ASD(a)-5/AEDC(a)/BSD/SSD/
ASD(r)-3/AFMDC/AFETR/APGC(b)/ESD(gs)/ESD(t) GW/WS
ACCESSION NR: AP5002108 S/0048/64/028/012/2085/2086

AUTHOR: Lazutin, L. L.; Frantaux, E. T.

TITLE: Radio probe for the measurement of cosmic-ray density in the stratosphere.
[Report presented at the Vsesoyuznoye soveshchaniye po fizike kosmicheskikh luchey
(All-Union Conference on the Physics of Cosmic Rays), held at Moscow, 4-10 October
1963]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 28, no. 12, 1964, 2085-2086

TOPIC TAGS: radiosonde, radiation measurement, solar radiation, cosmic radiation,
cosmic ray density, gas discharge counter, two counter telescope

ABSTRACT: A new radio probe for measuring cosmic-ray density in the ionosphere,
particularly solar radiation, is described. The design of the RKL-4¹ probe (see
Fig. 1 of Enclosure) was based on experimental data collected during the IGY. Reg-
istration of charged particles is accomplished with either a single STS-6 gas-dis-
charge counter or a two-counter telescope. Pulses from counters 1 and 2 (Fig. 1)
are applied to the collector and base of transistor 3, which is operating under
keying conditions; i.e., a negative pulse from counter 1 passes to the output only when
transistor 3 is closed by a positive pulse from counter 2. A blocking oscillator

Card 1/1

L 20233-65

ACCESSION NR: AP5002108

based on transistor 4 creates a positive pulse of 300 usec, triggering the tube 5 of the telemetry transmitter (frequency range, 80—90 Mc). In the RKL-4 with a single counter, the keying circuit is eliminated; a pulse from the counter directly triggers the blocking-oscillator. In this case the shaping circuit is blocked by the barograph contact, and the counting ceases. Substitution of a copper chloride-magnesium battery for the usual dry-battery set sharply increases the utilization factor of the chemical supply source. Tests carried out during the second and third quarters of 1963 demonstrated the reliability of the RKL-4 probe for 7—8-hr operation. Steady signal reception was secured in ascent, descent, and even drift (4—5 hr) at 25—30 km. Maximum altitude was 35 km. Since January 1964, regular daily flights of the probe have been made. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 01

SUB CODE: EC, AA

NO REF SOV: 002

OTHER: 000

ATD PRESS: 3163

Card 2/3

POTAPOV, V.M.; LAZUTINA, L.I.; TEREENT'YEV, A.P.

Spectropolarimetric analysis. Report No.3: Determination of isomeric nitrobenzaldehydes in their mixtures. Zhur.anal.khim. 18 no.8: 1003-1006 Ag '63. (MIRA 16:12)

1. Moscow State University.

SILAYEVA, V.I.; Primali uchastiye: SIDORIN, I.I., prof.; SIMAKOV, A.V.;
LAZUTIN, D.D.

MVTU-1 aluminum foundry alloy. Alium. splavy.no.1:14-21 '63.
(MIRA 16:11)

LAZUTIN, L.G.

KIREYEV, V.A., inzhener; LAZUTIN, L.G., inzhener.

Surface dressing on the Khar'kov-Simferopol' highway. Avt.dor.18
no.1:19 Ja-F '55. (MIRA 8:4)
(Roads--Maintenance and repair)

LAZUTIN, L.G., inzhener; KIREYEV, V.A., inzhener

Strengthen the technical inspection of construction joints of
reinforced concrete bridges. Avt. dor. 18 no.3:8-9 My-Je '55.
(Bridges, Concrete) (MIRA 8:9)

L 52183-65 ENT(1)/ENG(v)/FCG/EEC-4/EEC(t)/ EWA(h) Po-4/Pe-5/Pq-4/Pae-2/Peb/Pi-4

GW

ACCESSION NR: AF5014112

UR/0203/65/005/003/0563/0566

523.877

AUTHOR: Lazutin, L. L.

TITLE: Cosmic rays from the sun recorded in the stratosphere in September 1963

SOURCE: Geomagnetizm i aeronomiya, v. 5, no. 3, 1965, 563-566

TOPIC TAGS: sun, stratosphere, cosmic ray, gas discharge counter, radio wave, ionosphere/ RKL 4 radiosonde, STS 6 gas discharge counter

ABSTRACT: Stratospheric measurements obtained with RKL-4 radiosondes with single discharge counters of the type STS-6 are presented. The measurements were made above the region of Apatit (67°33' N, 33°20' E). The experimental method used was the one described by L. L. Lazutin and E. T. Frantsuz (Radiozond dlya izmereniya intensivnosti kosmicheskikh luchey v stratosfere, Izv. AN SSSR, ser. geofiz., 1964, No. 12, 2087). The region of the observed solar flare had the following coordinates: 310° long., 13° north latitude. The data concerning the following geophysical phenomena observed between the 13th and the 24th of September are presented: chromospheric flares in the sun; radio frequency flares in the range of 108 to 2800 megacycles; the relation between these phenomena and the spectral observations of radio waves in the range of 50-320 megacycles at Fort Davis (Solar Geophysical Data

Card 1/2

L 52183-65

ACCESSION NR: AP5014119

CRPL-F, part. B. Boulder, Colorado, 1963); sudden disturbances in the ionosphere due to x-rays from chromospheric flares; Bartel's K_p index; the H-component of the magnetic field in the region of Voeik; the count level of the neutron monitor in Dip River. The measurement on the 21.IX flare revealed a 1.7 power law for the counts. The author thanks V. Nikitenko and A. Ul'yanchenko for conducting the observations, and also L. I. Dorman, A. N. Cherkhoh'yan, T. N. Charakhch'yan and K. K. Fedchenko for taking part in the discussion of the results. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: *Polymery geofizicheskoy Institut, Kiz'skogo filiala AN SSSR (Dolaz*
Geophysical Institute, Dola Branch, AN SSSR)

SUBMITTED: 09Jul64

ENCL: 00

SUB CODE: AA

NO REF SOV: 006

OTHER: 001

gch
Crd 2/2

OSHAROV, P.; PAGIN, V.; TESLYA, Ye., inzh.; CHERNOVA, Ye.; KOPTEV, A.;
LAZUTIN, P.; ANISHCHENKOV, T., instruktor; TOKAREV, S.; BERSON,
S.; KRICHEVSKIY, A.

They have too far to go. Sov. profsoiuzy 18 no.5:40-41 Mr '62.
(MIRA 15:3)

1. Reydovaya brigada zhurnala "Sovetskiye profsoyuzy".
2. Krasnoyarskiy krayevoy komitet profsoyuza rabochikh stroitel'stva i promyshlennosti stroymaterialov (for Koptev). 3. Posadchik prokatnogo tsekha zavoda "Sibelektrostal'" (for Lazutin).
4. Krasnoyarskiy krayevoy komitet profsoyuza rabotnikov mestnoy promyshlennosti i kommunal'nogo khozyaystva (for Anishchenkov).
5. Zaveduyushchiy lektorskoy gruppoy Krasnoyarskogo krayevogo soveta profsoyuzov (for Tokarev). 6. Zaveduyushchiy otделom krayevoy gazety "Krasnoyarskiy rabochiy" (for Berson). 7. Spetsial'nyy korrespondent zhurnala "Sovetskiye profsoyuzy" (for Krichevskiy).
(Krasnoyarsk--City planning)

Lazutin, P.A.

AID P - 1193

Subject : USSR/Electricity
Card 1/1 Pub. 29 - 15/27
Author : Lazutin, P. A., Eng.
Title : Rewinding of squirrel-cage induction motors
Periodical : Energetik, 12, 22-26, D 1954
Abstract : The author presents a simple method of calculating a two-winding motor. Two tables and 9 diagrams.
Institution : None
Submitted : No date

IAZUTIN, V.N., inzh.; MYZNIKOV, Yu.N., inzh.

Construction of a rock-fill dam. Energ. stroi. no. 4:35-39
'65. (MIRA 18:12)

LAZUTIN, V.V.

Build quickly, economically, and well. Transp. stroi. 13
no.5:37-39 My '63. (MIRA 16:7)

1. Upravlyayushchiy ordena Lenina trestom Omsktransstroy.
(Building--Technological innovations)

POTAPOV, V.M.; DEM'YANOVICH, V.M.; LAZUTINA, L.I.; TERENT'YEV, A.P.

Stereochemical studies. Part 13: Rotatory dispersion of the derivatives of α - α -tolylethylamine and 2-aminobutane. Zhur.-ob.khim. 32 no.4:1187-1191 Ap '62. (MIRA 15:4)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Amines) (Molecular rotation)

LAZUTKA, F. A., Cand Med Sci -- (diss) "Spread of catarrh in the upper respiratory tracts and its prophylaxis for children of early and pre-school ages under the conditions of the climate of Lithuania." Vil'nyus, 1960. 18 pp; (State Committee of Higher and Secondary Specialist Education under the Council of Ministers Lithuanian SSk, Kaunas State Medical Inst); 170 copies; price not given; (KL, 22-60, 144)

LAZUTKA, P., med. m. kand.; BITE, A.; ARBACIAUSKIENE, L.

On the problem of improved sanitary conditions of dairy farms, of the quality of milk and of working conditions for milk maids in the Republic. Sveik. apsaug. 7 no.4(76):36-42 Ap '62.

1. Vilniaus Epidemiologijos ir higienos m. t. institutas.

(DAIRYING)

LAZUTKIN, A.

Where to study. Zashch. rast. ot vred. i bol. 10 no.8:
16 '65. (MIRA 18:11)

1. Starshiy metodist Uchebno-metodicheskogo upravleniya
Ministerstva sel'skogo khozyaystva SSSR.

KICHIGIN, A.P.; PIROGOV, V.K.; SALTANOV, A.D.; LAZUTKIN, A.G.

Narrow-cut UKD-2 cutter-loader working on the principle of
breaking away coal from the massif. Nauch. trudy KNIUI no.13:
241-243 '64 (MIRA 18:1)

LAZUTKIN, Andrey Ivanovich; YEL'KOV, F., red.; ZHDANOVA, G., tekhn.red.

[Gornyy Altai and its natural resources] Gornyi Altai i ego
prirodnye bogatstva. Barnaul, Altaiskoe knizhnoe izd-vo, 1960.
97 p. (MIRA 13:9)

(Gornyy Altai--Natural resources)

LAZUTKIN, D. F.

USSR/Mathematics - Wave Propagation
in Bar

Jan/Feb 52

"Propagation of Elastic-Plastic Waves Along a
Cylindrical Rod," D. F. Lazutkin, Kursk

"Prikl Matemat i Mekh" Vol XVI, No 1, pp 94-100

Analyzes case of wave propagation in cylindrical rod when pressure on left side rises according to any arbitrary law and thereafter instantaneously falls to zero. Strengthening is nonlinear and represented by some convex curve. Wave reflection from the right end is assumed negligible because of great rod length. Received 18 Jan 50.

203T62

DARUGA, V. K.; LAZUTKIN, I. I.; NIKOLAYEV, A. N.; SAKHAROV, V. K.; SINITSYN,
B. I.; TSYPIN, S. G.

Neutron passage through carbon and an iron-carbon mixture. Atom.
energ. 17 no.1:60-63 J1 '64. (MIRA 17:7)

ACCESSION NR: AP4042265

S/0089/64/017/001/0063/0065

AUTHOR: Daruga, V. K.; Lazutkin, I. I.; Nikolayev, A. N.; Pinkhasik, D. M.; Sakharov, V. K.; Sinitay*n, B. I.; Tsy*pin, S. G.

TITLE: Investigation of spatial energy distribution of BR-5 reactor neutrons in iron-ore medium

SOURCE: Atomnaya energiya, v. 17, no. 1, 1964, 63-65

TOPIC TAGS: reactor shielding, nuclear radiation, iron ore reactor shielding, BR 5 reactor, neutron energy distribution

ABSTRACT: The possibility of using an iron-ore medium as a relatively inexpensive form of nuclear-reactor shielding has been investigated. Ore with a high content of iron and oxygen was used in the experiment. Standard enriched iron ore of the following composition, suitable for construction and to withstand high temperatures without significant changes in its properties, was used as base material: 60% Fe; 30% O₂; 8—10% Si, Mg, Ca, Al; 1% Mn, Pb, Cu, Ti, C. Some binding admixtures were added to the concentrate to improve its constructional properties. A BR-5 fast reactor was used in the investigation. Based on the measurements by all detectors, the curves of

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ACCESSION NR: AP4042265

spatial-energy distribution of neutrons emitted by a disk-shaped collimated source were plotted. The results showed that hydrogenous iron-ore shielding has rather high attenuating properties for the whole neutron spectrum of the reactor. Unfortunately, its water component is just as unstable at high temperatures as in other shieldings. The introduction of more stable additives, such as metal hydrides, serpentines, etc., into the shielding material is recommended for better results. Orig. art. has: 3 figures, 2 tables, and 2 formulas.

ASSOCIATION: none

SUBMITTED: 07Mar64 /

ATD PRESS: 3068

ENCL: 00

SUB CODE: NP

NO REF SOV: 008

OTHER: 002

Card 2/2

L 08355-67 EWT(m)/EWP(t)/ETI IJP(c) JN'HW

ACC NR: AR6028130

SOURCE CODE: UR/0058/66/000/005/V061/V061

AUTHOR: Lazutkin, I. I.; Nikolayev, A. N.; Sinit'syn, B. I.

50

TITLE: Removal cross sections of sodium, stainless steel, and nickel

SOURCE: Ref. zh: Fizika, Abs. 5V469 ¹⁸ ₂₇

REF. SOURCE: Byul. Inform. tsentra po yadern. dannym, vyp. 2, 1965, 313-319

TOPIC TAGS: sodium, nickel, stainless steel, nuclear, reactor technology

ABSTRACT: The removal cross sections (RC) of sodium, stainless steel, and nickel were measured under conditions of standard geometry at initial neutron energies 0.5, 1.0, 1.2, 3.0, and 15 Mev. The measurement results are listed in a table. Data are also given on the minimal distances from the detector to a plate of heavy material, starting with which RC can be used. On the basis of the obtained data it is possible to determine the energy dependence of the RC of sodium and nickel. A plot for this dependence is given. [Translation of Abstract]

SUB CODE: 20, 18

Card 1/1 nst

LAZUTKIN, V.F.

Parabolic equation and the asymptotic behavior of eigenfunctions in the Helmholtz equation for three-dimensional domains. Vest.LGU 20 no.22:52-57 '65.

(MIRA 18:12)

L 32999-66 EWT(m)/ENP(e) WH

ACC NR: AR6016266

SOURCE CODE: UR/0058/65/000/011/H060/H061

AUTHOR: Lazutkin, V. N.

TITLE: Concerning the use of piezoceramics in high-power ultrasound converters

SOURCE: Ref. zh: Fizika, Abs. 11Zh417

REF SOURCE: Sb. Prim.niye ul'traakust. k issled. veshchestva. Vyp. 20, M., 1964, 83-86

TOPIC TAGS: ultrasonic emitter, piezoelectric ceramic, piezoelectric transducer, acoustic transducer

ABSTRACT: The authors analyze the factors limiting the radiation of large powerful converters (C) made of piezoceramic. Principal among them is the heating of the C. An expression is derived for the limiting acoustic power delivered by the C in the pulsed mode, as a function of the limiting loss power for the given C. Plots are presented of the dependence of the Q of the ceramic on the amplitude of the mechanical stresses in it for different compositions. The most effective were compositions based on lead-barium metaniobate and lead-titanate-zirconate with mechanical Q up to 300 -- 400. The C of lead-barium metaniobate is capable of radiating a power of 400 w/cm² in pulsed operation (off-duty factor 200). A. M. [Translation of abstract].

SUB CODE: 11.09/

Card 1/1

L 42952-66 EWP(e)/EWT(m) WH

ACC NR: AR6015878

(N)

SOURCE CODE: UR/0275/65/000/012/V011/V011

AUTHOR: Lazutkin, V. N.

TITLE: On the use of piezoceramics in power ultrasonic converters

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 12V73

REF SOURCE: Sb. Primeneniye ul'trakovykh k isled. veshchestva. Vyp. 20, M., 1984, 83-86

TOPIC TAGS: piezoelectric ceramic, ceramic product property, electromechanical converter

ABSTRACT: An examination is made of factors which limit high-power emission by converters (C) made of piezoceramics. The primary factor is considered to be the heating up of C. An expression is presented for the limiting acoustical power released by C in a pulsed mode as a function of limiting permissible power of losses for the C discussed. Curves of ceramics quality as a function of the amplitude of mechanical voltages in it are presented for various compositions. The most effective ceramics proved to be compositions on the basis of lead metaniobate-barium and titanium-lead zirconate with a mechanical quality of 300-400. C on the base of lead metaniobate-barium assures in a pulsed mode (with an off-duty factor of 200) a power of 400 w/cm². [Translation of abstract] A. M.

SUB CODE: 10, 11, 23

Cord 1/1

UDC: 534.232.46-8

LAZUTKINA, O.F.

Find of Triassic Bryozoa belonging to the Paleozoic genus
Batostomella. Paleont. zhur. no.4:126-128 '63.

(MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii
institut.

LAZUTKIN, S. T.

Vosstanovlenie Povrezhdennykh Vagonov (Restoring Damaged Railroad Cars), Moscow,
1944.

LAZUTKIN, S. T.

Peredovye metody tekushchego remonta gruzovykh vagonov. [Advanced methods of routine repair of freight-cars]/. Moskva, Gos. transp zhel-dor. izd-vo, 1950. 27 p. diagrs.
DLC: TF470.L3

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

LAZUTKIN, S.T.

LAZUTKIN, S.T., kandidat tekhnicheskikh nauk; KARTSEV, A.V., inzhener;
SHASHURIN, L.M., redaktor; MATSEYEVSKAYA, Ye.M. tekhnicheskiiy
redaktor

[Technical survey of railway freight cars] Tekhnicheskii osmotr
gruzovykh vagonov v poezdakh. Moskva, Gos. transportnoe zhelzno-
dorozhnoe izd-vo, 1953. 94 p. (MIRA 7:9)
(Railroads--Freight cars)

KATORZHNOV, N.D.; KUDRYAVTSEV, G.I.; KUZINA, Ye.F.; LAZUTKINA, T.P.

Studying the continuous process of the production of poly-
caprolactam. Khim. volok. no.4:20-22 '65. (MIRA 18:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna.

LAZUTKIN, Ye.
LAZUTKIN, Ye.

Scientific conference on problems in computing labor productivity
in agriculture. Sots.trud no.11:146-152 N '57. (MIRA 10:12)
(Agriculture--Economic aspects)

LAZUTKIN, Ye.; LITVINENKO, P.

Latent possibilities to increase labor productivity on collective farms. Sots.trud 4 no.2:36-44 F '59. (MIRA 12:4)
(Farm mechanization)
(Collective farms)

LAZUTKIN, Ye.S., kand.ekon.nauk; TEREHT'YEV, N.N., zootekhnik

Problems in economic accountability and the reduction of costs
in collective farm stockbreeding. Zhivotnovodstvo 20 no.9:
8-15 S '58. (MIRA 11:10)
(Stock and stockbreeding)

LAZUTKIN, Ye.S.; RUSANOV, Ye.S.; EYDEL'MAN, R.A.; TRUBNIKOV, S.V.; KAPLAN, I.I.; ZAGORODNIKOV, M.I.; GOL'TSOV, A.N.; TATARINOVA, N.I.; SONIN, M.Ya.; SHISHKIN, N.I., doktor geogr.nauk; ANTOSENKOV, Ye.G.; ZHMYKHOVA, I.I.; KOSYAKOV, P.O.; MATROZOVA, I.I.; ZELEN'SKIY, G.N.; SEMENKOV, Ya.S.; ZALKIND, A.I., red.; RUSANOV, Ye.S., red.; SHTEYNER, A.V., red.; MIKHAL'CHENKO, N.Z., red.; GERASIMOVA, Ye.S., tekhn. red.

[Manpower of the U.S.S.R.; problems in distribution and utilization]
Trudovye resursy SSSR; problemy raspredeleniia i ispol'zovaniia. Pod
red. N.I.Shishkina. Moskva, Izd-vo ekon.lit-ry, 1961. 243 p. (MIRA 14:12)

Moscow. Nauchno-issledovatel'skiy institut.
(Manpower)

POLIKANOV, S.M.; LAZUTKIN, Ye.S.

Two weeks with British physicists. Atom. energ. 14 no.4:425-427
Ap '63. (MIRA 16:3)

(Great Britain--Nuclear physics)

LAZUTKIN, Ye.

On the basic economic law of socialism and several methodological problems of economics. Vop. ekon. no.9:100-112 S '62.

(Economics)

(MIRA 15:9)

LAZUTKINA, A. A.

"About the effectiness of some medicinal substances a ainst foot rot of sheep."

Veterinariya, Vol. 38, No. 5, 1961

Lazutkina, A. A. - Veterinary Surgeon, B.Tolmak Veterinary Bacteriological Laboratory, Zaporozh'e Obl'st'.

LAZUTKOV, P.N., tekhnik; GORYAINOVA, D.S., inzh.

Utilization of carbonic acid obtained from the exhaust gases
of boilers. Energetik 9 no.4:17-19 Ap '61. (MIRA 14:8)
(Boilers)
(Carbon dioxide)